Claims

1.   A method in a communication system for relocating a
protocol termination point, comprising:

5   defining a protocol initialization unit containing
predefined information of a first termination point of a first
protocol by the first protocol;

        transferring the protocol initialization unit from the
first termination point to a second termination point by a
10   second protocol; and

        initializing the second termination point based on the
protocol initialization unit.

2.   A method according to claim 1, wherein the protocol
15   initialization unit contains state information of the first
protocol termination point.

3.   A method according to claim 1 or 2, wherein the first
termination point is located at a first network element of the
20   communication system and the second termination point is
located at a second network element of the communication
system.

4.   A method according to claim 3, wherein the second network
25   element, upon receiving the protocol information unit,
generates and transmits a response to the first network
element by means of the second protocol.

5.   A method according to any of the preceding claims,
30   wherein the protocol initialization unit is encapsulated in a
message transmitted between the first termination point and
the second termination point by the second protocol.

*sub a6)
cont*

6.   A method according to any of the preceding claims, wherein the protocol initialization unit is transparent for the second protocol.

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7.   A method according to any of the preceding claims, wherein the protocol initialization unit is transmitted via a third network element between the termination points.

10   8.   A method according to claim 7, wherein the transmission is based on a radio access network application part (RANAP) protocol.

sub a7)

9.   A method according to any of claims 1 to 6, wherein the

15   protocol initialization unit is transmitted by a direct connection between the termination points.

10.   A method according to claim 9, wherein the transmission is based on a radio network subsystem application part (RNSAP)

20   protocol.

sub a8)

11.   A method according to any of the preceding claims, wherein the predefined information of the first protocol comprise one or several parameters of a radio resource control

25   protocol (RRC), medium access control protocol (MAC), radio link control protocol (RLC), and/or packet data convergence protocol (PDCP).

12.   A method according to any of the preceding claims,

30   wherein the protocol initialization unit contains information of at least one further protocol.

13. A method according to any of the preceding claims, comprising steps of:

defining at least one further protocol initialization unit containing predefined information of a further protocol

5   by the further protocol; and

transferring the further protocol initialization unit from the first termination point to the second termination point.

10   14. A method according to claim 13, wherein the further protocol initialization unit is transferred between the termination points by a protocol that is different to the second protocol.

15   15. A method according to any of the preceding claims, wherein at least one of the termination points is located at one of the following: a base station controller, a radio network controller, a base station, a gateway.

20   16. A method according to any of the preceding claims, wherein the step of initializing the second termination point comprises setting the parameters of the second termination point into a state that is similar to the parameters of the first termination point before or at the time the relocation

25   procedure was initiated.

17. A communication system, comprising:

a first protocol termination point;

a second protocol termination point;

30   control means for relocating a first protocol from the first protocol termination point to the second protocol termination point, said control means being arranged to form a

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protocol initialization unit containing predefined information
of the first protocol at the first protocol termination point;
    communication path based on a second protocol between the
first and the second termination points for transferring the
5 protocol initialization unit; and
    control means for initializing the second protocol
termination point based on the protocol initialization unit.

18. A communication system according to claim 17, wherein the
10 protocol initialization unit contains state information of the
first protocol termination point.

19. A communication system according to claim 17 or 18,
wherein the control means for relocating are arranged to
15 encapsulate the protocol initialization unit into a message to
be transmitted from the first termination point to the second
termination point.

20. A communication system according to any of claims 17 to
20 19, wherein the first termination point is located at a first
network element of the communication system and the control
means for relocating are arranged in connection with the first
network element.

25 21. A communication system according to any of claims 17 to
20, wherein the second termination point is located at a
second network element of the communication system and the
control means for initializing are arranged in connection with
the second network element.

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22.   A communication system according to any of the claims 17 to 21, wherein the protocol initialization unit contains information of at least one further protocol.

5   23. A network element for use in a communication network, comprising:

a protocol termination point;

control means for relocating a first protocol from the protocol termination point to another protocol termination

10   point, said control means being arranged to form a protocol initialization unit containing predefined information of the first protocol at the protocol termination point; and

interface to said other protocol termination point based on a second protocol for transferring the protocol

15   initialization unit from the first termination point by means of the second protocol.

24. A network element according to claim 23, wherein the network element comprises a controller of a cellular

20   communication network.

25. A network element according to claim 23 or 24, wherein the control means for relocating are arranged to encapsulate the protocol initialization unit into a message to be

25   transmitted from the first termination point by means of the second protocol.

26. A network element according to any of claims 23 to 25, wherein the protocol initialization unit contains information

30   of at least one further protocol.

27. A network element for use in a communication network, comprising:

a protocol termination point of a first protocol;

interface to another protocol termination point for

5   receiving a protocol initialization unit containing predefined information of the first protocol at said other termination point, wherein the interface is based on a second protocol; and

control means for initializing the protocol termination

10 point based on the received protocol initialization unit.

28. A network element according to claim 27, wherein the network element comprises a controller of a cellular communication network.

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